Item ID:	D2956	Accept
Revision ID:		
Item Name:	Window Frame	

N9000040100

Setup Start ***NS1***

Stop ***NS2***

Start Date:	12/19/12	**Start Qty:** 4.00	**4**	**Cust Item ID:**
Required Date: 12/19/12		**Req'd Qty:** 4.00	**4**	**Customer:**
Reference:				

Run Start ***NR1***

Approvals: Process Plan: _____ Date: /2-01-3 Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D2956	Rev C								
100		0.00							
100 Waterjet	FLOW WATER JET					5	0		Jm13-4-23
FLOW CNC Waterjet 563.04w	**Memo** 1-Cut as per Dwg D2956 Dwg Rev: C Prog Rev: C 2- Deburr if necessary	0.00							
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110 QC	**Memo**	0.00				5	0		Jm 3-4-23
Quality Control									
120	QC8- Inspect parts - second check	0.00							
120 QC	**Memo**	0.00 13 4·23				5			
Quality Control									

NCR: Yes / No   # WORK ORDER NON-CONFORMANCE / UPDATE

Work Order: _____		DISPOSITION	AGAINST DEPARTMENT/PROCESS

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION
- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS
- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐
- ☐

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data ☐									
Equip/Tooling ☐									
Operator ☐									
Material ☐									
Setup ☐									
Other ☐									
Process ☐									
Supplier ☐									
Training ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear
- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General
- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio

- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions

- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge

- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other
- _____
- _____
- _____

December-20-12 9:08:55 AM

Item ID:	D2956		Accept	*N9000401OO*	Setup	Start	*NS1*
Revision ID:						Stop	*NS2*
Item Name:	Window Frame						

Start Date:	12/19/12	Start Qty: 4.00	*4*		Cust Item ID:		
Required Date: 12/19/12		Req'd Qty: 4.00	*4*		Customer:		

Reference: _____

						Run	Start	*NR1*
Approvals:	Process Plan: _____	Date: _____	Tooling: _____	Date: _____			Stop	*NR2*
	QC: _____	Date: _____	SPC (Y/N): _____	Date: _____				

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 **Memo**	0.00 0.00				5			13-4-23
140 *140* Powdercoat Powder Coating M125069	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum **Memo** START TIME: 3 FINISH TIME: 3250	0.00 3=30 0.00 OVEN TEMPERATURE: 4-0)				5x∅			m-/ 13/04/23
150 *150* QC Quality Control	QC3- Inspect Part Finish **Memo**	0.00 0.00				5 x			13/04/2(

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

Work Order: _____	**DISPOSITION**		**AGAINST DEPARTMENT/PROCESS**				
Part No. _____	Rework ☐		Skid-tube ☐	Crosstube ☐		Water Jet ☐	Engineering ☐
	Scrap ☐		Machining ☐	Small Fab ☐		Prod. Eng. Coor. ☐	Quality ☐
	Use-as-is ☐		Thermoforming ☐	Finishing ☐		Rec/Store/Packaging ☐	Other ☐
NCR No. _____	Work Order Update ☐		Large Fab ☐	Composite ☐		Supplier ☐	

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data ☐									
Equip/Tooling ☐									
Operator ☐									
Material ☐									
Setup ☐									
Other ☐									
Process ☐									
Supplier ☐									
Training ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear	**General**			
☐ Bending	☐ Bend	☐ Grain	☐ Ovalized	☐ Pressure/Forced
☐ Centre Not Concentric to O/S	☐ BOM/Route	☐ Hardware	☐ Over/Under tolerance	☐ Temperature/Cure
☐ Cracks	☐ Broken/Damaged	☐ Inspection Incomplete	☐ Part Incorrect	☐ Weld
☐ Crushed/Crimped	☐ Burrs	☐ Instructions Incomplete/Unclear	☐ Part Lost/Missing	☐ Wrong Stock Pulled
☐ Cuffs	☐ Contamination	☐ Maintenance	☐ Part Moved	
☐ Heat Treat	☐ Countersink	☐ Mislabeled	☐ Positioned Wrong	
☐ Inspection Strip in Tube	☐ Cut Too Short	☐ Misread	☐ Power Loss/Surge	☐ Other
☐ Ripples in Bend	☐ Drill Holes	☐ Offset		
☐ Torque Waves in Extrusion	☐ Drawing	☐ Out of Calibration	_____	
☐ Turning Sequence	☐ Finish	☐ Out of Sequence	_____	
☐ Wave/Twist in Tube	☐ Folio	☐ Outside Dimensions	_____	

Item ID:	D2956			Accept	*N9000401nn*	Setup	Start	*NS1*
Revision ID:							Stop	*NS2*
Item Name:	Window Frame							
Start Date:	12/19/12	Start Qty: 4.00	*4*		Cust Item ID:			
Required Date:	12/19/12	Req'd Qty: 4.00	*4*		Customer:			
Reference:								

Approvals:	Process Plan: _____	Date: _____	Tooling: _____	Date: _____	Run	Start	*NR1*
	QC: _____	Date: _____	SPC (Y/N): _____	Date: _____		Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* Packaging Packaging	Identify as per dwg & Stock Location:_____ Memo 5ɔ2l3	0.00 0.00						3/5/28	
170 *170* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00						13/5/3	ML 13-4-29

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS			
Part No. _____	Rework ☐	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
	Scrap ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
	Use-as-is ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
NCR No. _____	Work Order Update ☐	Large Fab ☐	Composite ☐	Supplier ☐	☐

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data ☐									
Equip/Tooling ☐									
Operator ☐									
Material ☐									
Setup ☐									
Other ☐									
Process ☐									
Supplier ☐									
Training ☐									
Unapproved									

FAULT CATEGORY

Landing Gear	General			
☐ Bending	☐ Bend	☐ Grain	☐ Ovalized	☐ Pressure/Forced
☐ Centre Not Concentric to O/S	☐ BOM/Route	☐ Hardware	☐ Over/Under tolerance	☐ Temperature/Cure
☐ Cracks	☐ Broken/Damaged	☐ Inspection Incomplete	☐ Part Incorrect	☐ Weld
☐ Crushed/Crimped.	☐ Burrs	☐ Instructions Incomplete/Unclear	☐ Part Lost/Missing	☐ Wrong Stock Pulled
☐ Cuffs	☐ Contamination	☐ Maintenance	☐ Part Moved	
☐ Heat Treat	☐ Countersink	☐ Mislabeled	☐ Positioned Wrong	
☐ Inspection Strip in Tube	☐ Cut Too Short	☐ Misread	☐ Power Loss/Surge	☐ Other
☐ Ripples in Bend	☐ Drill Holes	☐ Offset		_____
☐ Torque Waves in Extrusion	☐ Drawing	☐ Out of Calibration		_____
☐ Turning Sequence	☐ Finish	☐ Out of Sequence		_____
☐ Wave/Twist in Tube	☐ Folio	☐ Outside Dimensions		

Picklist Print

Work Order ID:	94806		
Parent Item:	D2956	Start Date: 12/19/12	Required Date: 12/19/12
Parent Item Name:	Window Frame	Start Qty: 4.00	Required Qty: 4.00

Comments: IPP A00.01.14New issueEC
IPP Rev:B   Now on Waterjet 07-06-25   JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M5052H32S.040 5052-H32 .040 Sheet		Purchased	No			100	sf	103.6000	3.2292	13.596632 14.0		Jm13-4-23	

Location	Loc Qty	Loc Code
MAT022	103.6	
119384	46	
122406	57.6	

124572   124572

WORK ORDER NON-CONFORMANCE / UPDATE

NCR: Yes / No

Work Order: _____	DISPOSITION		AGAINST DEPARTMENT/PROCESS				

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data ☐									
Equip/Tooling ☐									
Operator ☐									
Material ☐									
Setup ☐									
Other ☐									
Process ☐									
Supplier ☐									
Training ☐									
Unapproved									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio

- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions

- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge

- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled

- ☐ Other

_____

_____

_____

DART AEROSPACE LTD		Work Order:	94806
Description: Window Frame		Part Number:	D2956
Inspection Dwg: D2956 Rev: C			Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

| X | First Article | ☐ | Prototype |

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
25.00	+/-0.030	25.00"	—		ϖ	Jtmo6
18.50	+/-0.030	18.50"	—		T	
1.11	+/-0.030	1.118"	—		V	Jtmo1
1.50	+/-0.030	1.507"	—		V	
Ø0.171	+0.005 -0.000	0.173"	—		V	
Ø0.257	+0.005 -0.000	0.260"	—		✓	

Measured by:	JM	Audited by:	A 27 26	Prototype Approval:	N/A
Date:	13-4-23	Date:	13 4 23	Date:	N/A

Rev	Date	Change		Revised by	Approved
A	03.12.15	New Issue	P/O D350-567-025	KJ/RF	

DESIGN *CP*	DRAWN BY *CP*	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA		
CHECKED *H*	APPROVED *H*	DRAWING NO. D2956		REV. C SHEET 1 OF 1
DATE 01.06.04		TITLE WINDOW FRAME		SCALE 1:5
	A	00.01.20	NEW ISSUE	
	B	00.02.23	⌀0.141 HOLES WERE ⌀0.128 (NCR 407)	
	C	01.06.04	REMOVE ⌀0.141 HOLES	

q41804

25.00 (REF)

14.00 (REF)

⌀0.171
(TYP 22 PLACES, REF)

R13.00
(REF)

⌀0.257
(TYP 9 PLACES, REF)

R4.50
(REF)

18.50
(REF)

10.10
(REF)

11.50
(REF)

1.50 (TYP, REF)

1.11 (TYP, REF)

R3.00
(TYP 3 PLACES, REF)
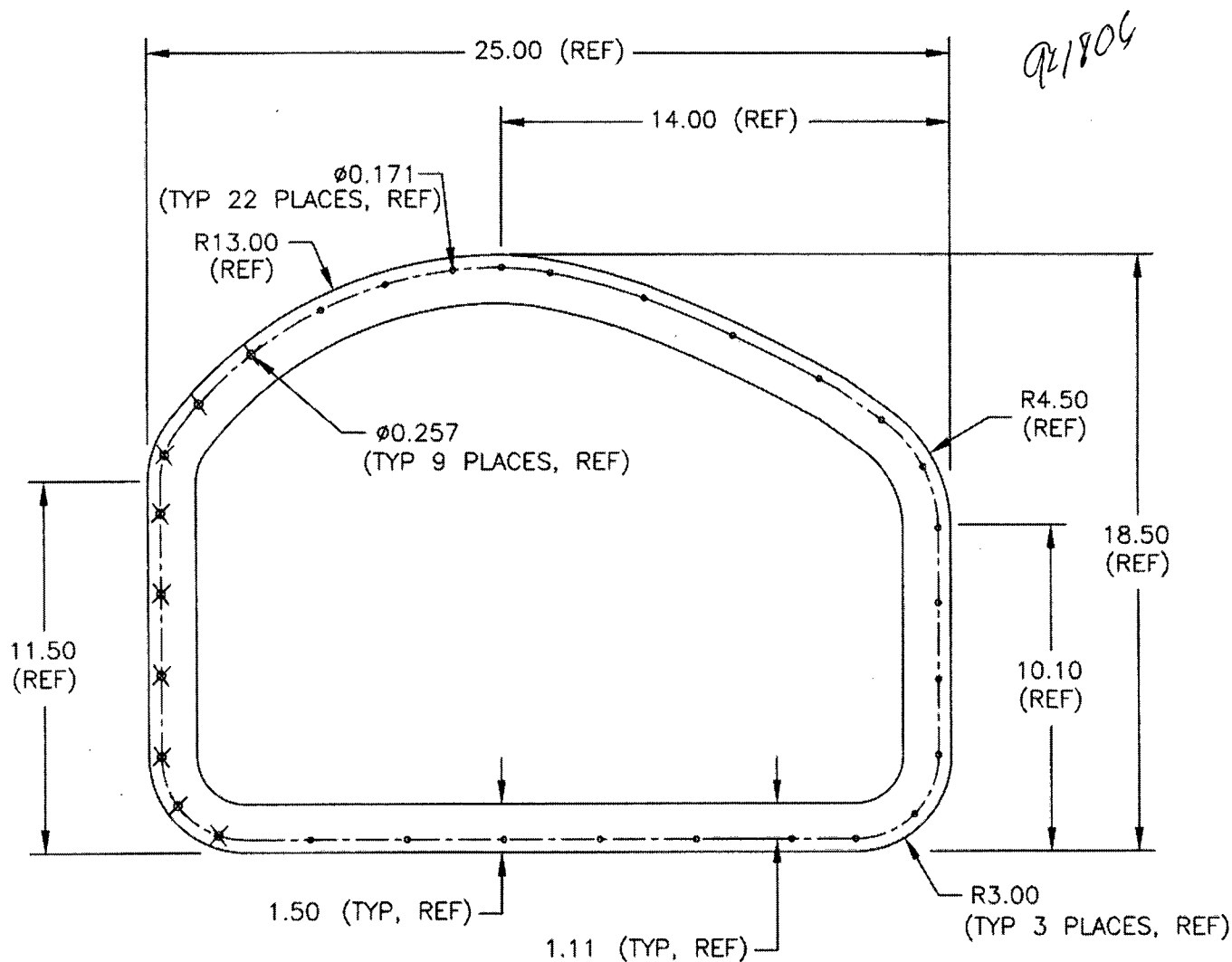
D2956 FLAT PATTERN

MACHINE PER DRAWING FILE "D2956-C1.DWG"
CHECK HOLES PER TEMPLATE DT8437
BEND PER TEMPLATE DT8567
MATERIAL: 5052-H34 (QQ-A-250/8) SHEET 0.040 THICK
FINISH: POWDER COAT WHITE (REF. 4.5.3.1) PER DART QSI 005 4.3
ALL DIMENSIONS ARE IN INCHES
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED